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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
09/834,243	04/12/2001	Jimmy A. Tatum	M40.26493-04 U.S.	5859

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EXAMINER	
LE, QUE TAN	

ART UNIT	PAPER NUMBER
2878	

DATE MAILED: 07/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/834,243	TATUM ET AL.	
	Examiner	Art Unit	
	Que T. Le	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *the amendment filed June 2, 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) *10-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *10-14* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
4) ☐ Interview Summary (PTO-413) Paper No. s
5) ☐ Notice of Informal Patent Application (PTO-152)

This is in response to Applicants amendment filed June 2, 2003.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, the citation of "a memory for storing characteristics of a monitored environment" on line 6 of claim 5 is vague. What exactly are the characteristics of a monitored environment? Where are the characteristics coming from? The manner in which characteristics being achieved has not been clearly defined. Also, the phrase "determines target characteristics based on said signals received by said detector, reference to said memory and input from said motion analysis module", on lines 12-14, is vague in its given context.

Claims 6-9 are indefinite because they include the indefiniteness of the claims on which they depend.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, [illegible]

[illegible] patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 and 1-6 of copending Application No. 09/834,244 and 09/834,242, respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed invention, claims 1-9, of the present application is a similar version of the claimed invention, claims 1-6 and 1-7, of the above identified U.S. Patents with similar intended scope. Note that different terminologies used for a "training and detection module", "motion analysis module" and/or "control module" are considered art recognized equivalents. Also, selecting a known available "photodiode" for an optical detection device or detector is a mere matter of obvious design choice to one of ordinary skill in the optics art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3 and 5-8, as understood by examiner, are rejected under 35 U.S.C. 102(b) as being anticipated by Korah et al 6,115,111.

Korah et al disclose a sensing system comprising: a vertical cavity surface emitting laser source (20) having a plurality of apertures (22A – 22C) for emitting a plurality of laser signals; at least one CCD (28) as detector; a microprocessor including a motion analysis module and a display (24, 36, 80) for determining motion/displacement of an object. The laser sources are able to emit at least two laser signals statically and/or serially.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

With respect to claims 4 and 9, although Korah et al lack an inclusion of the use of a photodiode for the detector, selecting a known available detector device such as photodiode for detecting an optical signal would have been obvious to one of ordinary skill in the art. It would have been obvious to modify Korah et al accordingly in order to provide a compact optics design for the system. This would also provide a longer lasting life for detection performances of the system.

Applicant's arguments filed 6/2/03 have been fully considered but they are not persuasive.

With respect to Applicants' arguments, on page 6 of the remarks, in which applicants include information of all co-pending patent applications and believe that it would overcome the provisional rejection of claims 1-9 under the judicially created doctrine of obviousness-type double patenting doctrine as being unpatentable over claims contained in co-pending Application no. 09/834,244 and 09/834,242, applicants is reminded that the above mentioned rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees; thus, the inclusion of copending applications would not overcome the rejection mentioned above.

Accordingly, the rejection set forth above is proper.

With respect to Applicants' arguments, on pages 10-11 of the remarks, applicants have failed to response to the examiner's concerns. Applicants fail to provide an adequate explanation regarding "characteristics of a monitored environment"(?) being stored in a memory, line 6, and probably a missing text in the phrase "reference to said memory, on line 13, both of claim 5. Applicants contend that in claim 5, "Lines 9-13 ... as follows: "wherein ... determination"". This is an incorrect statement because the above mentioned phrase has not found in the claimed invention of the claim 5 of the present application.

Accordingly, the rejection set forth above is proper.

With respect to Applicants' arguments, on pages 11-12 of the remarks, in which applicants state that "Korah et al (reference) does not sequence its lasers (e.g. on/off) during operation as taught by Applicants", this is not found persuasive because the above mentioned features has not been clearly found or recited in the claimed invention, claims 1-3 and 5-8. Note that Korah et al disclose the use of a plurality of semiconductor lasers wherein at least one laser is configured to emit a single beam of laser light toward a monitored surface or all of the semiconductor laser sources are to emit laser light beams at one or one after another depend upon different (distance) positions of the laser sources with respect to the monitored surface or target and/or a direction of displacement of the target surface. Also, the CCD array 28 of Korah et al is

detector operationally responsive to laser signal(s). With respect to applicants assertion that "Korah et al is not interested in reflectance, blockage or interruption of laser signals through its detector to determine target characteristics, such as a target's motion", this is found incorrect statement because as the laser beams, of Korah et al reference, reflected or blocked or interrupted by a monitored surface S, the beams are reflected toward and be detected by a CCD array for determining the movement direction and/or displacement of the surface, and in addition, at least Figure 4 shows a feedback loop of the Korah et al system. Thus, Korah et al disclose the claimed features.

Accordingly, the rejection set forth above is proper.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Que T. Le whose telephone number is (703) 308-4830.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Que T Le
Primary Examiner
Art Unit 2878